

REMARKS

Claims 7, 10, 13 and 17 are pending and under consideration in the above-identified application. Claims 1-6, 8-9 and 11-12 were previously cancelled and remain cancelled.

In the Office Action of April 22, 2009, claims 7, 10, 13 and 17 were rejected.

With this amendment, claims 7 and 17 are amended.

I. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 7, 10, 13 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Narang et al.* (US 6,168,885) in view of *Schneider et al.* (US 6,180,281) in view of *Gozdz et al.* (US 5,840,087) in view of *Kumeuchi et al.* (US 6,156,080) in view of *Takamiya et al.* (US 6,150,455) in view of *Ichino et al.* (US 5,858,264). Applicant respectfully traverses this rejection.

In relevant part, each of the independent claims 1 and 17 recites the step of forming a first set of gel-electrolyte layers on both sides of a positive electrode collector and forming a second set of gel-electrolyte layers on both sides of a negative electrode collector with said gel-electrolyte layers comprising an electrolyte salt, a nonaqueous solvent and a matrix polymer where the matrix polymer includes polyvinylidene flouride and polyhexafluoropropylene and has an ion conductivity higher than 1 mS/cm at room temperatures.

The Examiner correctly asserts that *Narang* fails to disclose or even fairly suggest a matrix polymer including polyvinylidene flouride and polyhexafluoropropylene. See, Office Action of April 22, 2009, at Page 6. Accordingly, *Narang* also does not disclose a matrix polymer having an ion conductivity higher than 1 mS/cm at room temperatures.

Schneider, Kumeuchi and Takamiya do not disclose anything pertaining to a matrix polymer, much less a matrix polymer including polyvinyldene flouride and polyhexafluoropropylene with an ion conductivity higher than 1 mS/cm at room temperatures.

Gozdz and *Ichino*, similarly, fail to disclose or even fairly suggest forming a first set of gel-electrolyte layers on both sides of a positive electrode collector and forming a second set of gel-electrolyte layers on both sides of a negative electrode collector with said gel-electrolyte layers comprising an electrolyte salt, a nonaqueous solvent and a matrix polymer where the matrix polymer includes polyvinyldene flouride and polyhexafluoropropylene and has an ion conductivity higher than 1 mS/cm at room temperatures. Instead, *Gozdz* discloses a polymeric matrix consisting only of a polyvinyldene flouride. See, U.S. Pat. No. 5,840,087, Col. 3, l. 1-12. *Gozdz* fails to disclose anything pertaining to a matrix polymer having an ion conductivity higher than 1 mS/cm. *Ichino* discloses a composite polymer electrolyte membrane consisting of only polytetrafluoroethylene. See, U.S. Pat. No. 5,858,264, Col 3, l. 13-40.

As the Applicant's specification discloses, by forming a first set of gel-electrolyte layers on both sides of a positive electrode collector and forming a second set of gel-electrolyte layers on both sides of a negative electrode collector with said gel-electrolyte layers comprising an electrolyte salt, a nonaqueous solvent and a matrix polymer where the matrix polymer includes polyvinyldene flouride and polyhexafluoropropylene and has an ion conductivity higher than 1 mS/cm at room temperatures, a large discharge capacity and high energy density are realized. See, Specification, Page 21, l. 6-10.

Therefore, because *Kumeuchi, Narang, Schneider, Takamiya, Ichino* and any combination of them fail to disclose or even fairly suggest each feature of claims 7 and 17, the

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rejection of claims 7 and 17 cannot stand. Because claims 10 and 13 depend, either directly or indirectly, from claims 7 and 17, they are allowable for at least the same reason.

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II. Conclusion

In view of the above amendments and remarks, Applicant submits that all claims are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

Respectfully submitted,

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By: /David R. Metzger/
David R. Metzger
Registration No. 32,919
SONNENSCHEIN NATH & ROSENTHAL LLP
P.O. Box 061080
Wacker Drive Station, Sears Tower
Chicago, Illinois 60606-1080
(312) 876-8000

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